

Abstract Submitted
for the APR12 Meeting of
The American Physical Society

Nucleon elastic form factors in a relativistic quark model¹ SIMON CAPSTICK, Florida State University, BRADLEY KEISTER, Physics Division, National Science Foundation — Nucleon elastic form factors are described using a light-cone (relativistic) quark model. The constituent quarks have anomalous magnetic moments fit to the nucleon magnetic moments, and simple form factors fit to the higher- Q^2 behavior of the nucleon electric and magnetic form factors. This model is able to explain the rapidly decreasing ratio of the proton electric to magnetic form factors, and also predicts a zero in the proton electric form factor at approximately 7 GeV^2 , which is where the trend of the recent data for G_E^p suggests it should be.

¹This work was supported in part by DOE grant DE-FG05-92ER40750.

Simon Capstick
Florida State University

Date submitted: 06 Jan 2012

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